WHAT IS CLAIMED IS

1. An electromagnetic connector for high voltages and large currents, comprising a primary winding (12) connected to a high-voltage, large-current power supply (1), a secondary winding (14) connected to an electromagnetic forming coil (2), and a magnetic core (16) for guiding the magnetic flux produced by the primary winding, into the secondary winding, wherein

the magnetic core (16) comprises a primary core (16a) with a primary winding and a secondary core (16b) with a secondary winding,

the primary core and the secondary core are magnetically connected together by putting them in contact or in close proximity, and separeated each other when the connector is disconnected.

2. The electromagnetic connector for high voltages and large currents, specified in Claim 1, wherein the magnetic core (16) is a closed rectangle in shape, and the primary core (16a) and the secondary core (16b) comprise U-shaped structures produced from the rectangle by cutting the rectangle into two parts.

3. The electromagnetic connector for high voltages and large currents specified in Claim 2, wherein the cut surfaces of both the U-shaped structures are in close contact with each other or located close to each other when connected, and can be configured to keep a space between

them when they are disconnected.

the two parts cut as above can be in close contact with each other or located close to each other when connected, and can be configured to keep a space between them when they are disconnected.

4. The electromagnetic connector for high voltages and large currents, specified in Claim 1, wherein the primary winding (12) and the secondary winding (14) are wound on each core (16a or 16b) in such a manner that both windings (12, 14) overlap each other concentrically, when the connector is connected.

5. The electromagnetic connector for high voltages and large currents, specified in Claim 1, wherein the magnetic core comprises silicon steel sheets, a ferrite material or an amorphous material.

6. The electromagnetic connector for high voltages and large currents, specified in Claim 1, wherein the primary winding (12) and the secondary winding (14) are molded separately in a plastic resin.